SURVEY OF VOLCANIC HAZARDS IN THE TRANS MEXICAN VOLCANIC BELT

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A substantial percentage of the world's population (>10%) lives in areas vulnerable to the negative effects of future VOIcanic activity. This is especially true in Mexico, where within the Trans Mexican Volcanic Belt (TMVB) 1/2 of the country's 90 million inhabitants live. The TMVB is a 1000 by 200 km area, dotted with hundreds of volcanoes and volcanic centers. Most of the area has been poorly studied, and the volcanic history is largely unknown. Our approach is to combine interpretations of satellite images, field work and mapping, laboratory analysis, and age dating to elucidate the volcanic history and evaluate the potential eruptive hazards. We have assembled a digital mosaic of Landsat images to serve as a mapping base. Perspective views are created with the addition of digital elevation data to assist. in analysis. The interpretations guide us to key areas for field work and sampling for radiometric age determinations. Hazards evaluations are done in the form of risk maps.

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